

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) A method for an item ordering service to currently supply ordered items to recipients in a manner that is selected based on modeled future costs of supplying expected future orders, the method comprising:

receiving multiple orders, each order from a customer and indicating one or more items for delivery to a recipient; and

for each of the multiple orders, determining a fulfillment plan specific to the order that minimizes future monetary costs of fulfilling expected future orders, the determining being performed in response to receiving the order and before the expected future orders are received, the determining including:

determining multiple distinct fulfillment plans for supplying the items of the order to the recipient for the order, each fulfillment plan indicating for each of the items of the order that the item is to be shipped from an indicated one of multiple geographically distributed item distribution centers and indicating a manner of shipping the items from the indicated item distribution centers;

for each of the determined distinct fulfillment plans for the order, modeling at least some of the future monetary costs of supplying expected future orders to recipients if the items of the order are supplied using that fulfillment plan, the modeling including,

for each item distribution center indicated by the fulfillment plan to ship one or more indicated items, determining if the shipping of those indicated items by that item distribution center will result in an overload of work at that item distribution center when fulfilling expected future orders and will result in a shortage of inventory of those indicated items at that item distribution center when fulfilling expected future orders; and

assigning the modeled future costs based at least in part on estimates of future costs for correcting any determined work overloads and any determined inventory shortages;

selecting one of the determined fulfillment plans based at least in part on the modeled future costs of using that fulfillment plan to supply the items of the order; and

indicating to supply the items of the order to the recipient for the order using the selected fulfillment plan.

2. (Original) The method of claim 1 wherein the item ordering service is a Web-based service, and including displaying information about the selected fulfillment plan to the customer via a transmitted Web page.

3. (Original) The method of claim 1 including, for each of the determined fulfillment plans for the order, determining an overall cost of using that fulfillment plan to supply the items of the order by:

determining at least some of multiple costs that are directly attributable to using that fulfillment plan to supply the items of the order;

assigning costs to at least some of one or more reductions in customer goodwill that result from using that fulfillment plan to supply the items of the order; and

totaling the modeled future costs, the determined directly attributable costs, and the assigned customer goodwill reduction costs,

and wherein the selecting of the one determined fulfillment plan is based on the determined overall cost of using that fulfillment plan to supply the items of the order.

4. (Original) The method of claim 1 wherein the modeling of future costs and the selecting of a fulfillment plan based at least in part on those modeled future costs is performed for each of multiple orders over a period of time upon receiving each order, so that an optimal manner of fulfilling all of the multiple orders over the period of time can be achieved based on using fulfillment plans that are dynamically determined at the time each order is received.

5. (Original) The method of claim 1 wherein one of the multiple geographically distributed item distribution centers is a default item distribution center for fulfilling the order based at least in part on a location of the order recipient relative to the location of that item distribution center, wherein the selected fulfillment plan indicates an item distribution center other than the default item distribution center, wherein another determined fulfillment plan indicates only the default item distribution center, and wherein the one determined fulfillment

plan is selected based on a difference in the modeled future costs of the selected determined fulfillment plan and the another determined fulfillment plan being greater than a cost of moving the order from the default item distribution center to the other item distribution center.

6. (Original) The method of claim 1 including, for at least some of the determined fulfillment plans, determining an actual delivery date on which the items of the order will be supplied to the recipient if that fulfillment plan is used for the supplying.

7. (Original) The method of claim 1 including predicting demand at a future time for one or more items of the order at each of multiple geographic locations, the predicting based in part on a time-of-day and a day-of-week of the future time, and wherein the modeling of the future costs and the selecting of the fulfillment plan are based at least in part on the predicted demand at the future time so as to prospectively balance a workload that will be placed on each of the item distribution centers in the future.

8. (Original) The method of claim 1 including, before the receiving of the order, performing a planning activity to determine optimal loads of work and optimal inventories of items for each of the item distribution centers at future times, and wherein the determining of any work overloads is based at least in part on the optimal loads of work determined for a time of the receiving of the order, and wherein the determining of any inventory shortages is based at least in part on the optimal inventories determined for a time of the receiving of the order.

9. (Original) The method of claim 1 wherein the determining if shipping items by an item distribution center will result in an overload of work at that item distribution center includes determining a current overload status of that item distribution center based at least in part on a difference between actual and expected item shipment requests that were allocated to that item distribution center over a prior specified time period.

10. (Original) The method of claim 1 wherein the determining if shipping items by an item distribution center will result in a shortage of inventory of those items at that item

distribution center includes determining an imbalance between an actual and expected inventory of those items at a current time at that item distribution center.

11. (Original) The method of claim 1 wherein the modeling of the future costs for each of at least some of the determined fulfillment plans includes, for one or more of the item distribution centers indicated by that fulfillment plan to ship one or more indicated items, determining if the shipping of those indicated items by that item distribution center will result in a future exhaustion of inventory at that item distribution center of those indicated items before replenishment is scheduled to occur, and wherein the assigning of the modeled future costs of using that fulfillment plan to supply the items of the order is further based on estimates of future costs for correcting any determined future inventory exhaustions before scheduled replenishment.

12. (Original) The method of claim 1 including receiving an indication of preferred ordering instructions for the customer, the preferred ordering instructions indicating a manner of shipping items and indicating the customer to be the recipient, and wherein the determining of the fulfillment plans is performed so that each of the determined fulfillment plans is consistent with the preferred ordering instructions.

13. (Original) The method of claim 1 wherein at least some of the determined fulfillment plans additionally indicate one or more processing lanes to be used at each of the indicated item distribution centers, and wherein the determining if the shipping of those indicated items by those item distribution centers will result in an overload of work is based on a determination of whether the indicated processing lanes will have an overload of work.

14. (Original) The method of claim 1 wherein at least some of the determined fulfillment plans additionally indicate a manner for an indicated item distribution center to acquire at least some of the items of the order, and wherein the selecting of the one determined fulfillment plan is further based on costs and/or delays associated with the indicated acquiring manners.

15. (Original) The method of claim 1 wherein for at least some of the determined fulfillment plans the items of the order are split into multiple groups that will be shipped from multiple item distribution centers, and wherein the selecting of the one determined fulfillment plan is further based on an additional cost assigned to those fulfillment plans.

16. (Original) A method for selecting a fulfillment option for fulfilling an order based on costs associated with fulfilling related future orders, the method comprising:

receiving an indication of one or more items;

determining multiple fulfillment options for fulfilling an order for the items, each fulfillment option indicating one or more distribution centers to be used to fulfill the order;

for each of at least some of the determined fulfillment options, associating with that fulfillment option a cost of use that reflects costs of fulfilling one or more future orders, the associating by performing at least one of a group of actions that comprises,

if using the fulfillment option for the fulfilling of the order will result in a disparity between an actual level of work and a desired level of work at one or more of the distribution centers indicated by the fulfillment option, including in the associated cost of use for the fulfillment option a cost that reflects a future correction of the work level disparity;

if using the fulfillment option for the fulfilling of the order will result in a disparity between an actual inventory level and a desired inventory level at one or more of the distribution centers indicated by the fulfillment option, including in the associated cost of use for the fulfillment option a cost that reflects a future correction of the inventory level disparity; and

if using the fulfillment option for the fulfilling of the order will result in a future exhaustion of inventory at one or more of the distribution centers indicated by the fulfillment option, including in the associated cost of use for the fulfillment option a cost that reflects a future correction of the inventory exhaustion; and

selecting one of the determined fulfillment options to be used for fulfilling the order based at least in part on the associated costs of use for the selected fulfillment option.

17. (Original) The method of claim 16 including indicating to order the items using the selected fulfillment option.

18. (Original) The method of claim 16 including providing an indication of the selected fulfillment option.

19. (Original) The method of claim 16 including providing indications of multiple of the determined fulfillment options to a customer associated with the indicated items and receiving an indication of at least one of the indicated fulfillment options, and wherein the selecting is further based on the received indication.

20. (Original) The method of claim 19 wherein the provided indications of the fulfillment options each include an indication of the associated cost of use for that fulfillment option.

21. (Original) The method of claim 19 wherein the provided indications of the fulfillment options each include an indication of a manner in which the order will be fulfilled if that fulfillment option is used.

22. (Original) The method of claim 19 wherein the provided indications are part of a generated Web page that is presented to the customer.

23. (Original) The method of claim 16 including determining whether the indicated items represent a bulk order having a number of items that exceeds a threshold, and wherein the determining of the multiple fulfillment options is performed only when the indicated items are determined to represent a bulk order.

24. (Original) The method of claim 16 including determining whether a cost of the items exceeds a threshold, and deciding whether to perform the determining of the multiple fulfillment options based on the determined cost of the items.

25. (Original) The method of claim 16 wherein the received indication of the items includes an indication of a recipient for the items, and wherein the determining of the multiple

fulfillment options and/or the associating of the costs of use are performed in a manner based at least in part on the recipient.

26. (Original) The method of claim 16 wherein the received indication of the items includes an indication of a customer that may order the items, and wherein the determining of the multiple fulfillment options and/or the associating of the costs of use are performed in a manner based at least in part on the customer.

27. (Original) The method of claim 16 wherein the received indication of the items includes an indication of a manner of supplying the items, and wherein the determining of the multiple fulfillment options and/or the associating of the costs of use are performed in a manner so as to reflect the manner of supplying the items.

28. (Original) The method of claim 16 including determining a priority for fulfilling the order, and wherein the determining of the multiple fulfillment options and/or the associating of the costs of use are performed in a manner so as to reflect the determined priority.

29. (Original) The method of claim 16 wherein the associated cost of use for a fulfillment option reflects a cost that will be charged to a customer for using the fulfillment option.

30. (Original) The method of claim 16 wherein the associated cost of use for a fulfillment option reflects a cost that will be incurred by a supplier of the items.

31. (Original) The method of claim 16 wherein the method is performed on behalf of an item ordering service, and wherein at least some of the fulfillment options indicate distribution centers for third-party suppliers of items.

32. (Original) The method of claim 16 wherein each of the fulfillment options indicates a manner of shipping the items from the indicated distribution center to a recipient.

33. (Original) The method of claim 16 wherein each of the fulfillment options indicates one or more processing lanes to be used at each of the indicated distribution centers.

34. (Original) The method of claim 16 wherein each of the fulfillment options indicates a manner of acquiring at least some of the items.

35. (Original) The method of claim 16 wherein each of the fulfillment options indicates a manner of processing at least some of the items at the indicated distribution centers.

36. (Original) The method of claim 16 wherein the received indication of the items represents an order placed for those items.

37. (Original) The method of claim 16 wherein the received indication of the items represents a potential order for those items based on a determination of possible interest of a potential customer in those items.

38. (Original) The method of claim 16 wherein the selecting of the one fulfillment option includes ranking multiple of the determined fulfillment options using a specified criteria and selecting the fulfillment option having the highest rank.

39. (Original) The method of claim 16 wherein the cost for the future correction of the work level disparity is a positive cost to reflect an overload of work.

40. (Original) The method of claim 16 wherein the desired level of work at a distribution center is an optimal level of work for that distribution center.

41. (Original) The method of claim 16 wherein the cost for the future correction of the inventory level disparity is a positive cost to reflect a shortage of inventory.

42. (Original) The method of claim 16 wherein the desired inventory level at a distribution center is an optimal inventory level for that distribution center.

43. (Original) The method of claim 16 including, for each of at least some of the determined fulfillment options, determining an overall cost of using that fulfillment option that includes the associated cost of use and at least some costs directly attributable to supplying the items.

44. (Original) The method of claim 16 including, for each of at least some of the determined fulfillment options, determining an overall cost of using that fulfillment option that includes the associated cost of use and a cost that reflects at least some expected changes in customer goodwill that will result from using that fulfillment option.

45. (Original) The method of claim 16 including, for each of at least some of the determined fulfillment options, determining an overall cost of using that fulfillment option that includes the associated cost of use and costs for one or more of the indicated distribution centers for that fulfillment option that are specific to that distribution center and that reflect a level of willingness for that distribution center to fulfill the order.

46. (Original) The method of claim 16 including adjusting a mechanism for calculating an amount of one or more of the costs reflecting future corrections in order to control how quickly the corrections will occur.

47. (Original) The method of claim 16 wherein the costs reflecting future corrections are projected costs.

48. (Original) The method of claim 16 including, before the receiving of the indication of the items, predicting demand for multiple items, and wherein the desired levels of work and the desired levels of inventory are based at least in part on the predicted demand.

49. (Original) The method of claim 48 wherein the predicted demand is for a future time and is based at least in part on a time-of-day and a day-of-week of the future time

50. (Original) The method of claim 48 wherein the predicted demand is for each of multiple regions that are associated with distribution centers.

51. (Original) The method of claim 16 including, before the receiving of the indication of the items, determining desired work level values and desired inventory level values for each of the distribution centers at a future time, and wherein a time of the performing of the group of actions corresponds to the future time such that values of the desired works levels and desired inventory levels that are used to determine the disparities are the previously determined values.

52. (Original) The method of claim 51 including, before the receiving of the indication of the items, automatically deciding to determine the values for the desired work levels and the desired inventory levels based on current conditions.

53. (Original) The method of claim 16 including identifying a distribution center as a default distribution center for fulfilling the order, and wherein a cost that reflects a correction of inventory exhaustion is included in the associated cost of use for a fulfillment option only if the fulfillment option indicates a distribution center other than the default distribution center.

54. (Original) A computer-readable medium whose contents cause a computing device to select a fulfillment option for fulfilling an order based on costs of fulfilling future orders, by performing a method comprising:

receiving an indication of one or more items;

for each of multiple fulfillment options for fulfilling an order for the items by using an indicated distribution center, associating with that fulfillment option a cost that reflects costs of fulfilling one or more future orders, the associating by performing at least one of a group of actions that comprises,

if using the fulfillment option for the fulfilling of the order will result in a disparity between an actual level of work and a desired level of work at the distribution center indicated by the fulfillment option, including in the associated cost for the fulfillment option an estimated cost that reflects a correction of the work level disparity; and

if using the fulfillment option for the fulfilling of the order will result in a disparity between an actual inventory level and a desired inventory level at the distribution center indicated by the fulfillment option, including in the associated cost for the fulfillment option a estimated cost that reflects a correction of the inventory level disparity; and

selecting one of the determined fulfillment options to be used for fulfilling the order based at least in part on the associated costs for the selected fulfillment option.

55. (Original) The computer-readable medium of claim 54 wherein the estimated costs reflect future corrections.

56. (Original) The computer-readable medium of claim 54 wherein the computer-readable medium is a memory of a computing device.

57. (Original) The computer-readable medium of claim 54 wherein the computer-readable medium is a data transmission medium transmitting a generated data signal containing the contents.

58. (Original) The computer-readable medium of claim 54 wherein the contents are instructions that when executed cause the computing device to perform the method.

59. (Currently Amended) A computing device for selecting a fulfillment option for fulfilling an order based on costs of fulfilling future orders, comprising:

an option determiner component that is capable of determining multiple fulfillment options for fulfilling an order for one or more items, each fulfillment option indicating a distribution center to be used to fulfill the order;

a future cost determiner component that is capable of, for each of at least some of the determined fulfillment options, associating with that fulfillment option a projected future cost of fulfilling one or more future orders, the projected future cost based on correcting one or more conditions that result from using the fulfillment option for the fulfilling of the order, and wherein the future cost determiner component calculates the projected future cost for a fulfillment option by performing at least one of a group of actions that includes: and

..... if using the fulfillment option for the fulfilling of the order will result in a disparity between an actual level of work and a desired level of work at one or more of the distribution centers indicated by the fulfillment option, including in the projected future cost of use associated with the fulfillment option a cost that reflects a future correction of the work level disparity; and

..... if using the fulfillment option for the fulfilling of the order will result in a disparity between an actual inventory level and a desired inventory level at one or more of the distribution centers indicated by the fulfillment option, including in the projected future cost of use associated with the fulfillment option a cost that reflects a future correction of the inventory level disparity; and

a selection component that is capable of selecting one of the determined fulfillment options to be used for fulfilling the order based at least in part on the projected future costs for the selected fulfillment option.

60. (Original) The computing device of claim 59 wherein the option determiner component, the future cost determiner component, and the selection component are executing in memory of the computing device.

61. (Canceled)

62. (Currently Amended) A computer system for selecting a fulfillment plan for fulfilling an order based on costs of fulfilling future orders, comprising:

means for determining multiple fulfillment plans for fulfilling an order for one or more items, each fulfillment plan indicating a distribution center to be used to fulfill the order;

means for, for each of at least some of the determined fulfillment plans, associating with that fulfillment plan a projected future cost of fulfilling one or more future orders, the projected future cost based on correcting one or more conditions that result from using the fulfillment plan for the fulfilling of the order, and wherein calculating of the projected future cost for a fulfillment option is further based on performing at least one of a group of actions that includes: +

and

..... if using the fulfillment option for the fulfilling of the order will result in a disparity between an actual level of work and a desired level of work at one or more of the distribution centers indicated by the fulfillment option, including in the projected future cost of use associated with the fulfillment option a cost that reflects a future correction of the work level disparity; and

..... if using the fulfillment option for the fulfilling of the order will result in a disparity between an actual inventory level and a desired inventory level at one or more of the distribution centers indicated by the fulfillment option, including in the projected future cost of use associated with the fulfillment option a cost that reflects a future correction of the inventory level disparity; and

means for selecting one of the determined fulfillment plans to be used for fulfilling the order based at least in part on the projected future costs for the selected fulfillment plan.

63-101. (Canceled)